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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,910	05/31/2001	Ichiko Mayuzumi	1232-4720	7763
27123	7590	01/31/2006		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER FLANDERS, ANDREW C	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,910

Applicant(s)

MAYUZUMI, ICHIKO

Examiner

Andrew C. Flanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection that are necessitated by Applicant's amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7, 10, 12 – 19, 23, 24, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 7, 10, 12 – 19, 23, 24, 28 and 29 recite the limitation "the set number of audio channels". There is insufficient antecedent basis for this limitation in the claim. It appears to the examiner as though the new limitations should read "wherein said transmission means of said transmission apparatus sets the number of audio channels to be used for transmission..." which corrects the lack of antecedent basis. For the purpose of expediting prosecution, it will be understood in that manner.

Furthermore, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

Claims 1, 7, 10, 12 – 18 and 28 recite the broad recitation of setting the number of audio channels, which could refer to any number from zero to infinity, and the claim also recites performing communication of two audio signals which is the narrower statement of the range/limitation.

Claims 18, 19, 23, 24 and 29 recite the broad recitation of setting the number of audio channels, which could refer to any number from zero to infinity, and the claim also recites performing communication of two audio signals and a monaural audio signal which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferriere (U.S. Patent 6, 728,478) in view of Fuchigami (U.S. Patent 6,463,410).

Regarding **Claim 1**, Ferriere discloses:

A video conference and video telephone system which includes transmission and reception apparatuses for performing communication of two audio signals of L and R channels (Figs. 1 and 2b), wherein

said transmission apparatus comprises:

transmission means for transmitting data (Fig. 1 element 53);

said reception apparatus comprises:

reception means for receiving the data (Fig. 1 element 49);

wherein said transmission means of said transmission apparatus sets the number of (audio) channels to be used for the transmission, according to the kind of audio source of said transmission apparatus, and transmits the set number of audio

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channels to said reception apparatus (i.e. the IMAudioInputMixer interface contains a set of methods preferably including put_Enable which is used to enable or disable an audio input in the mixed output, get_enable which is used to determine if an audio input is enabled, put_Mono which is used to determine if all audio channels of an input are combined into a mono audio signal; col. 8 lines 3 – 3).

Ferriere does not explicitly disclose that the transmitting data is obtained by addition of the two audio signals as a first data through a first communication channel, and transmitting data obtained by subtraction of the two audio signals as a second audio data through a second communication channel; or

the reception means receiving the data obtained by the addition of the two audio signals as the first audio data and data obtained by the subtraction of the two audio signals as the second audio data, and restoring means for restoring the audio signal by performing an arithmetic operation on the basis of the audio data received by said reception means.

Fuchigami discloses:

transmitting data obtained by addition of the two audio signals a first audio data through a first communication channel, and transmitting data obtained by subtraction of the two audio signals as second audio data through a second communication channel (i.e. $L+R$ and $L - R$ are transmitted via a multiplexer; Figs. 1 and 2 and the associated text in the disclosure);

receiving the data obtained by the addition of the two audio signals as the first audio data and data obtained by the subtraction of the two audio signals as the second

audio data, and restoring means for restoring the audio signal by performing an arithmetic operation on the basis of the audio data received by said reception means (i.e. $L+R$ and $L - R$ are received via a de-multiplexer; Figs. 1 and 4 and the associated text in the disclosure).

It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit and receive audio signals as taught by Fuchigami in the apparatus disclosed by Ferriere. One would have been motivated to do so to create a transmission system with a higher compression performance; Fuchigami col. 1 lines 1 – 30 and lines 38 – 67.

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1, the combination further discloses:

where the first audio data represents monaural audio and the second audio data represents stereo audio (i.e. Fuchigami discloses a $L+R$ and an $L-R$ signal; Figs. 1 – 4; Applicant defines $L+R$ signal as a monaural signal and an $L-R$ signal as capable of providing a stereo signal in the specification on page 25 and thus the limitation is anticipated by Fuchigami and made obvious by the combination);

said transmission means of said transmission apparatus transmits, according to whether an audio source of said transmission is the stereo audio or the monaural audio, a change of the audio source to said reception apparatus (i.e. the `IAMAudiInputMixer` interface contains a set of methods preferably including `put_Enable` which is used to enable or disable an audio input in the mixed output, `get_enable` which is used to

determine if an audio input is enabled, put_Mono which is used to determine if all audio channels of an input are combined into a mono audio signal; col. 8 lines 3 – 3 in Ferriere);

said restoring means of said reception apparatus restores the audio signal on the basis of the first audio data obtained by addition of the two audio signals and the second audio data obtained by the subtraction of the two audio signals when the audio source of said transmission apparatus is the stereo audio (i.e. Fig. 1 of Fuchigami and in Ferriere the IMAudioInputMixer interface contains a set of methods preferably including put_Enable which is used to enable or disable an audio input in the mixed output, get_enable which is used to determine if an audio input is enabled)

, and restores the audio signal on the basis of only the first audio data obtained by the addition of the two audio signals when the audio source of said transmission apparatus is the monaural audio (put_Mono which is used to determine if all audio channels of an input are combined into a mono audio signal; col. 8 lines 3 – 3 in Ferriere)

Regarding **Claim 3**, in addition to the elements stated above regarding claim 1, the combination further discloses:

wherein said transmission means of said transmission apparatus transmits the number of audio channels of said transmission apparatus to said reception apparatus, as describing it at a source description of an RTCP (real time control protocol) packet (i.e. put_Mono which is used to determine if all audio channels of an input are combined

into a mono audio signal; col. 8 lines 3 – 3 in Ferriere and the data is sent via an RTCP channel col. 2 lines 18 – 21 in Ferriere).

Regarding **Claim 4**, in addition to the elements stated above regarding claim 1, the combination further discloses:

wherein said transmission means of said transmission of said transmission apparatus transmits a type of audio input device of said transmission apparatus to said reception apparatus, as describing it at a source description of an RTCP packet (i.e. put_Mono which is used to determine if all audio channels of an input are combined into a mono audio signal (whether it is a mono or stereo input); col. 8 lines 3 – 3 in Ferriere and the data is sent via an RTCP channel col. 2 lines 18 – 21 in Ferriere).

Regarding **Claim 5**, in addition to the elements stated above regarding claim 5, the combination further discloses:

wherein each of said transmission apparatus and said reception apparatus has notification means for notifying its own capability by using a mode request message according to the H.245 standard of ITU-T (International Telecommunication Union Telecommunication Standardization Sector) Recommendation (i.e. a mode request procedure; col. 8 lines 33 – 53 and in order to provide control functions an H.245 control channel is established; col. 2 lines 20 – 25).

Regarding **Claim 6**, in addition to the elements stated above regarding claim 1, the combination further discloses:

wherein said transmission means of said transmission apparatus adjusts the number of channels to be used for transmission, according to the kind of audio source of said transmission apparatus (i.e. Fig. 1 of Fuchigami and in Ferriere the IMAAudioInputMixer interface contains a set of methods preferably including put_Enable which is used to enable or disable an audio input in the mixed output, get_enable which is used to determine if an audio input is enabled), and

said reception means of said reception apparatus adjusts the number of channels to be used for the reception according to the number of channels to be used for transmission (it is inherent that the number of channels received and decoded by the reception apparatus of the combination will be adjusted according to the number of channels enabled in the Ferriere reference).

Regarding **Claims 7 – 17 and 28**, the combination disclosed above regarding claims 1 and 2 make obvious all elements of claims 7 – 17 and 28 except for first and second generation means for generating packet data and transmitting the first and second generated packet data, mainly the transmission and reception of data in packets. The combination further discloses this in Fig. 1 of Ferriere in which a network transmission is shown in element 51. Furthermore, Fuchigama also shows a means for generating a data stream in Fig. 1 element 250. As such these limitations are also

made obvious as the transmission is done through a network and thus packet data is generated.

Regarding **Claims 18 – 27 and 29**, claims 18 – 27 and 29 are made obvious for the same reasons stated above regarding claims 1 and 2.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

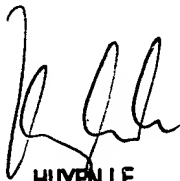
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acf



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PRIMARY EXAMINER